

1 *The need for an entrepreneurial theory of the firm*

The theory of entrepreneurship and the theory of the firm should be treated together. And yet, the important connections between these two bodies of literature have been largely overlooked. This is our book's basic motivation.

How, then, are entrepreneurs and firms connected? Do entrepreneurs need business firms to carry out their function? Or, do firms need entrepreneurs to survive in the competitive market process? And if there is a role for the entrepreneur in the firm, what is it, exactly? Where in the firm does entrepreneurial activity mainly take place? How does the organization of the firm influence entrepreneurial actions? Are business firms run by entrepreneurs, or rather by hired managers? How does firm organization (e.g., the allocation of residual income and control rights) affect the quantity and quality of entrepreneurial ideas? Can entrepreneurship be a property of a managerial team – or is it strictly an individual phenomenon?

To practitioners, policymakers, and other non-specialist readers, these questions seem to strike at the very core of our understanding of markets – price theory, industrial economics, strategic management, organization theory, even marketing and finance. Entrepreneurial behavior does not, after all, occur in a vacuum. Entrepreneurs, like other economic actors, employ scarce means to achieve their objectives, must economize on these means, must evaluate trade-offs at the margin, and so on.¹ Moreover, as both entrepreneurship and the theory of the firm deal with business ventures, new firm formation, new as well as sustained value creation, etc., one would expect substantial

¹ As we will see in Chapter 2 and elsewhere below, several important entrepreneurship theories abstract from scarcity, treating entrepreneurial ability as an extra-economic attribute or function that cannot, itself, be analyzed as a scarce resource. Even so, entrepreneurs need complementary factors of production – land, labor, capital – that are subject to the usual laws of supply and demand.

cross-fertilization to take place, simply because so many important, practical research questions appear at the intersection of these two fields. And yet, the study of entrepreneurship and the study of organizing in the economy lack contact. Indeed, the modern theory of the firm ignores entrepreneurship, while the literature on entrepreneurship in economics and management research has limited use for the economic theory of the firm.

As a result, there is no serious theory of the entrepreneurial firm to guide decision-making for the kind of problems that intimately involve both entrepreneurship and organizing. To be sure, there are theories of start-up firms in economics and in management and large literatures on product, process, and organizational innovation. But mature firms, as well as new firms, act entrepreneurially – witness the emphasis on “corporate renewal” and “entrepreneurialism” among practitioners – and entrepreneurship reveals itself in many activities besides innovation. Even non-market actors, including public officials, philanthropists, and university professors, are urged to be “entrepreneurial.”

A good theory of entrepreneurship should explain the conditions under which entrepreneurship takes place, the manner in which entrepreneurship is manifested, and the interaction between entrepreneurial activity and firm, industry, and environmental characteristics. In the contemporary entrepreneurship literature, entrepreneurship is typically seen as a theory of firm creation; once created, however, the firm ceases to be “entrepreneurial” and becomes dominated by “managerial” motives – a partial legacy of Schumpeter’s early and influential work on innovation (Schumpeter, 1911). However, processes of firm formation, growth, and ongoing operation are continuous, and things that matter at the early stages do not disappear overnight. A holistic view of entrepreneurship thus requires an understanding of the managerial and organizational aspects of the entrepreneurial function. In like manner, we think the economic theory of the firm can be improved substantially by taking seriously the entrepreneurial aspects of firm organization and strategy. In sum, the theory of entrepreneurship and the economic theory of the firm have much to learn from each other. However, they must first be brought into contact.

Prompted by what we see as a fundamental disconnect between these two strands of research literature, each of which has much to learn from the other, our basic aim in this book is to describe and

exploit gains from trade by bringing entrepreneurship and the (theory of the) firm much closer together, to the benefit of both, as well as the fields and disciplines in which they are embedded. We see few substantial obstacles to doing so. The conventional separation between entrepreneurship and the theory of the firm is not due to any inherent incompatibility, but is largely an idiosyncratic consequence of the way the field of economics developed, particularly after WWII. Indeed, there is a certain historical irony in this separation because one of the key early contributions to the economic theory of entrepreneurship, Frank H. Knight's *Risk, Uncertainty and Profit* (1921), is also a pioneering analysis of basic issues about firms, markets, and competition that contemporary economists view as the foundational questions of the theory of the firm.

However, both the theory of the firm and the theory of entrepreneurship developed in a way that the original Knightian program of providing a unified treatment to the firm and the entrepreneur became stalled. Our overall aim is to revitalize this Knightian program. In the remaining part of this chapter, we further explain the need for such an integrated undertaking, describe some of the historical and disciplinary reasons why integration hasn't yet taken place, and provide a summary of our positive argument.

The theory of the firm in economics

The economic theory of the firm – also known as the economics of organization or organizational economics – is a well-established and influential area of economics. Thus, transaction-cost economics (Williamson, 1985), agency theory (Holmström, 1979), mechanism design, the nexus-of-contracts approach (Jensen and Meckling, 1976), and the property-rights theory of the firm (Hart and Moore, 1990) are now part of the standard discourse among academics, students, and practitioners studying firms and markets.²

In the management literature, resource and knowledge-based views of the firm have come to dominate the analysis of organizational performance (Wernerfelt, 1984; Barney, 1986, 1991; Peteraf,

² We here follow standard practice and include agency theory under the “theory of the firm,” although strictly speaking this theory is not about the existence and the boundaries of firms (Hart, 1989).

1993; Peteraf and Barney, 2003), theories that in various ways build on earlier theories of the firm, be they behavioral (Cyert and March, 1963), evolutionary (Nelson and Winter, 1982), or neoclassical economic (Demsetz, 1973). Moreover, the economic theories of the firm mentioned above have also been hugely influential in management research for a long time (see Mahoney, 2005). Rumelt (1984) long ago argued that strategic management should rest on the “bedrock foundation” of the “economist’s model of the firm.” Many scholars in strategic management and neighboring fields followed his call (Foss, 1999; Becarra, 2009).

In short, the economic and managerial analysis of the firm is a vibrant area of research and application characterized by a diversity of competing theories and approaches and a robust empirical literature. Of course, the firm has long been central to economics, in the theory of production and exchange, the analysis of industry structure, labor economics, and a few other areas. Introductory textbooks all contain a section on the “theory of the firm” containing the familiar equations and diagrams describing the firm’s production possibilities set, its cost and revenue curves, and the equilibrium pricing and production decisions. Firms are useful in basic economics because they are necessary parts of doing price theoretical analysis (Machlup, 1963). When economists address the industry- or economy-wide consequences of, say, a change in the price of an input, the analysis involves addressing how a representative firm will react to the change in terms of input substitution, product price, and so on.³

However, the theory of the firm as a contractual or organizational entity – the literature on the existence, boundaries, and internal organization of the enterprise spawned by Ronald Coase’s “The Nature of the Firm” (1937) – is, in the history of economics, a relatively recent development. As discussed in Chapter 6 below, the economics of business organization emerged as a distinct field only in the 1970s with

³ The idea of the “representative firm” comes from Marshall (1890), who imagined an entity that “has had a fairly long life, and fair success, which is managed with normal ability, and which has normal access to the economies, external and internal, which belong to that aggregate volume of production; account being taken of the class of goods produced, the conditions of marketing them and the economic environment generally.” See Foss (1994a) on the role of this heuristic device in Marshallian and post-Marshallian thought more generally.

the path-breaking contributions of Williamson (1971, 1975, 1979), Alchian and Demsetz (1972), Hurwicz (1972), Marschak and Radner (1972), Ross (1973), Arrow (1974), Jensen and Meckling (1976), Klein, Crawford, and Alchian (1978), Holmström (1979), and others. Once economists realized they needed a theory of economic organization, the theory of the firm in this Coasean sense became part of the canon, and arguably one of the theoretical and empirical success stories of economics.⁴ In important respects, as we argue below, the theory of the firm can further the entrepreneurship field, fundamentally because it addresses important issues regarding the locus of entrepreneurship that have not been addressed in entrepreneurship research.

Entrepreneurship

More recently, the analysis of entrepreneurship has seized the spotlight in economics. Other social sciences, including sociology (Thornton, 1999), anthropology (Oxfeld, 1992), political science (Klein, McGahan, Mahoney, and Pitelis, 2010), and economic and business history (Landes *et al.*, 2010), have begun to explore the entrepreneurial concept as well. In business schools, entrepreneurship is starting to be incorporated into management, marketing, finance, and accounting, rather than being a standalone program on new firm formation (business plan writing, venture funding, technology transfer, and the like). Indeed, the last decade has witnessed an explosion of university courses, faculty positions, research and educational centers, journals, publications, and grant funding dedicated to the study of entrepreneurship. Economists increasingly see entrepreneurship as a key to technological progress, and (therefore) an important part of the growth process (e.g., Blau, 1987; Aghion and Howitt, 1992; Baumol, 1994; Wennekers and Thurik, 1999; Blanchflower, 2000).

Recognition of the entrepreneur's importance predates even the *Wealth of Nations*, playing a central role in Richard Cantillon's (1755) pioneering treatise. One might thus expect the entrepreneur to be central to economic theorizing over the last two-and-a-half centuries. However, as we will explain later, this has not been the case; on the contrary, at least since WWII entrepreneurship has been left

⁴ The term "success story" is Williamson's (2000: 605), describing the empirical work in transaction cost economics.

out of the economics mainstream, only be stressed by prolific and perhaps well-known, yet “heterodox” (and therefore rather un influential) economists, notably Austrian (e.g., Mises, 1949; Hayek, 1968; Kirzner, 1973) and Schumpeterian (Futia, 1980; Nelson and Winter, 1982). In fact, in spite of the appearance of two seminal papers about three decades ago that provided two fundamental “recipes” for modeling entrepreneurship in its self-employment sense (Lucas, 1978; Kihlstrom and Laffont, 1979), it is only over the last decade or so that mainstream economists have become seriously interested in the entrepreneur.

While it is widely recognized that formal modeling of the mainstream economics variety cannot do full justice to entrepreneurship,⁵ at least some aspects of entrepreneurship can be captured using the standard tools of equilibrium and constrained maximization. An issue that has received much attention is the analysis of occupational choice (e.g., Holmes and Schmitz, 1990) and its implications for a host of policy issues (e.g., the incentives of minority groups to become entrepreneurs, access to credit as an entry barrier, the relative contribution to innovation of small and large firms, etc.). This research stream is virtually synonymous with contemporary economics research on entrepreneurship. Some work has also considered issues of direct relevance to management research, such as entrepreneurial learning (e.g., Parker, 1996). Overall, entrepreneurship is becoming a legitimate research subject in economics.⁶

The situation in management is similar in a number of respects. Entrepreneurship has long been an established field in management studies, but research in this area has been substantially transformed in the last decade. To some extent this is a result of a much closer liaison with strategic management (Baker and Pollock, 2007), giving rise to the field of strategic entrepreneurship.⁷ But it is also, and

⁵ Bianchi and Henrekson (2005: 354) survey many of the mainstream models of entrepreneurship and conclude that in these models “entrepreneurship is invariably narrowly defined and it cannot be said to capture the wide-ranging and complex functions suggested outside mainstream economics.”

⁶ Parker (2005) provides an excellent overview of recent entrepreneurship research in economics.

⁷ Evidence for the spread of entrepreneurial ideas to strategic management research includes the 2008 launch of the *Strategic Entrepreneurship Journal*, a sister journal to the highly prestigious *Strategic Management Journal*. Representative strategic entrepreneurship papers include Hitt and Ireland

perhaps much more importantly, a matter of a drastic transformation of the field of entrepreneurship itself. While early research was mainly taken up with the management of small and family business, more recent research – drawing on insights from psychology, economics, and sociology – is directed toward a broader set of issues, theories, and phenomena, with more attention to defining constructs, formulating precise research questions, and establishing standard research procedures (see Shane [2003] for an overview).

This raises a more general issue: What, exactly, is entrepreneurship? An easy way of delineating different types of entrepreneurs and economic theories of entrepreneurship is to distinguish between those that define entrepreneurship as an *outcome* or a phenomenon (e.g., self-employment, start-ups) and those that see entrepreneurship as a *way of thinking or acting* (e.g., creativity, innovation, alertness, judgment, adaptation).

Much early work on entrepreneurship (e.g., Schumpeter, 1911; Knight, 1921) falls into the latter category, what Klein (2008b) calls “functional,” in the sense that entrepreneurship was invoked as a necessary step to explaining other phenomena such as economic development (Schumpeter) or the existence of the firm and profit (Knight). Because the entrepreneur was merely a necessary analytical stepping stone to understanding other phenomena, typically at higher levels of analysis, they were treated in rather abstract, stylized terms. This is highly akin to the treatment of the firm in basic price theory (Machlup, 1967), where the firm receives a similarly abstract treatment. Some modern work in economics on the entrepreneur, specifically, Kirzner’s (1973, 1985, 1992), has also treated the entrepreneur in highly abstract terms – and for similar reasons: In these approaches the interest is not in the entrepreneur per se, but in those phenomena that the presence of the entrepreneur help to explain. Moreover, these approaches do not pay much attention to the antecedents of entrepreneurial activity (Bjørnskov and Foss, 2008).

In contrast, the management research literature on entrepreneurship (and some work in labor economics) has given much more detail

(2000), Ahuja and Lampert (2001), and Ireland, Hitt, and Sirmon (2003). Foss and Lyngsie (2011) survey the strategic entrepreneurship field and discuss its relations to neighboring fields and theories such as the resource-based and dynamic capabilities views.

to the entrepreneur and entrepreneurial actions, describing the decision heuristics he makes use of (Sarasvathy, 2003), the biases he may suffer from (Busenitz and Barney, 1997), the experience base for his actions (Shane, 2000), the kind of uncertainty he confronts (Alvarez and Barney, 2010), the network structure that he is a part of (Sorenson and Stuart, 2005), his previous employment experience (Klepper, 2002; Braguinsky, Klepper, and Ohyama, 2009; Elfenbein, Hamilton, and Zenger, 2010), and so on. Much of this literature has been drawn to Kirzner's concept of entrepreneurship as "opportunity discovery" (Shane and Venkataraman, 2000), although, as we shall show (Chapter 2), this may be partially based on a misunderstanding of the nature of Kirzner's work.

Why entrepreneurship and the (theory of the) firm belong together

The firm as the locus of entrepreneurial activity

The research literatures on the theory of the firm and entrepreneurship can, we believe, be brought together to form a better theory of the firm and a fuller understanding of the nature and economic effects of entrepreneurship. From this perspective, the questions that arise in the intersection of entrepreneurship and the theory of the firm relate to the *locus* of entrepreneurship.⁸ In an influential and programmatic statement, Shane and Venkataraman (2000: 218) argued that management scholars in strategy and organization are fundamentally concerned with three sets of research questions, namely why, when, and how (1) entrepreneurial opportunities arise, (2) certain individuals and firms and not others discover and exploit opportunities, and (3) different modes of action are used to exploit those opportunities. These issues include the issue of "how the exploitation of entrepreneurial opportunities are organized in the economy" (2000: 224). When they wrote their paper, Shane and Venkataraman could point to little work moving the field forward along these lines. Nearly a decade later the situation is not much better, though the need for integration is increasingly realized. We argue that economic theories of the firm are

⁸ It is perhaps telling that one of the most influential entrepreneurship journals is (still) called *Small Business Economics*.

particularly well-equipped to understand not only the “exploitation,” but also the discovery and even the evaluation of entrepreneurial opportunities. And these theories mesh even more closely with other approaches to entrepreneurship, as we shall see in later chapters.

One of our objectives is to explain, in this context, why entrepreneurs choose certain ways and not others for organizing their activities. These are questions that are becoming increasingly pertinent, as argued above, and, indeed, some of them are considered in the recent economics and management literature on entrepreneurship. However, they are only treated in a highly limited manner. Consider, for example, Lucas’ (1978) general equilibrium model, the starting point for much modern economics work on entrepreneurship. The model examines the matching of firms and entrepreneurial talent, given that entrepreneurial talent is unequally distributed. “Entrepreneurial talent” is really a portmanteau variable that includes entrepreneurial, managerial, and ownership skills. Lucas describes a matching between firm size and entrepreneurial talent, the most able entrepreneurs running the largest firms. This suggests one association – albeit a highly stylized one – between firm organization and entrepreneurship.

One may question whether making entrepreneurship a factor of production and conceptualizing it solely as a coordinating function is really in the spirit of the classics of entrepreneurship (see Bianchi and Henrekson, 2005: 358). More to the point, however, it is unclear in Lucas’ treatment why entrepreneurs would need firms at all. Why can’t they perform their coordinating function simply by using contracts? Why are the governance mechanisms of the firm required? A similar critique may be directed at another important treatment, Kihlstrom and Laffont’s (1979) model of self-employment. In this model, individuals differ in risk preferences but are otherwise identical. Picking up on a remark in Knight (1921) (on firm organization implying that the “venturesome” insure the “timid”), Kihlstrom and Laffont show the existence of an equilibrium with the population of agents divided into less-risk-averse entrepreneurs and more-risk-averse workers. Moreover, they link entrepreneurship to taking “responsibility for enterprise,” and therefore bearing risk. It is clear from their discussion that they think this happens in the context of firms. However, it is not obvious why people need to form firms to share risks, when they could just as easily do it through contract. By implication, much of the subsequent research based on these two

papers (and on Holmes and Schmitz, 1990) overlooks the issue of the locus of entrepreneurship in the proper comparative-institutional sense (Coase, 1964; Williamson, 1985): the relevant alternatives are not systematically identified and the net benefits compared.

Relatedly, most of the economics literature on entrepreneurship treats its *explanandum* as companies, implying that entrepreneurial activity ceases after the start-up phase. Much management research on entrepreneurship has simply *defined* entrepreneurship as the creation of new firms, or, more broadly: organizations. Either way, *established* firms are simply excluded from the set of entrepreneurial agents in the economy in very large parts of entrepreneurship research. However, as the recent strategic entrepreneurship literature argues, established firms may act in a highly entrepreneurial way, discovering and seizing new opportunities, exercising judgment over existing and potential resources, and introducing new products and processes (Hitt and Ireland, 2000). Seizing new opportunities through acquisition, divestiture, diversification, or refocusing constitutes a change in firm boundaries, one of the key issues in the Coasean theory of the firm. Or, established firms may wish to stimulate a kind of behavior inside the corporate hierarchy that seems fully “entrepreneurial” – what is often called “intrapreneurship” or “corporate venturing” in the management literature on entrepreneurship. Established firms can reorganize themselves by using incentive pay (Jensen and Meckling, 1992) or other devices such as “access” (Rajan and Zingales, 1998). This involves another key issue in the Coasean theory of the firm, namely that of internal organization.

As we have mentioned, management scholars in organization, strategic management, international business, etc. have often drawn eclectically on the theory of the firm. For example, many issues of strategic management (e.g., vertical integration or diversification decisions) are now routinely framed as problems of efficient governance. And among the most cited scholars in the top business administration journals is Oliver Williamson, perhaps the best-known representative of the modern theory of the firm (Williamson, 1975, 1985, 1996). However, if we turn our attention to recent management research literature on entrepreneurship, we see little on the *locus* of entrepreneurship, despite the earlier plea of Shane and Venkataraman (2000).